

Vital Signs Town Hall Teleconference
Working Together to Stop Multistate Foodborne Outbreaks
Q & A
November 10, 2015
1:00 pm CT

Dan Baden: All right thank you very much for these excellent presentations. Remember you can get into queue to ask a question or make a comment by pressing star 1. Say your name when prompted and the operator will announce when it's your turn. Please address your questions to a specific presenter or indicate that it's a question for all the presenters. And also remember that we have Dr. Kathleen Gensheimer and Dr. David Goldman now joining the discussion part. I encourage you to take advantage of this opportunity to share your own strategies, lessons learned, challenges and success stories.

You can pose questions to our presenters or to each other. We have quite a few states and organizations on the call so this is a forum for you to discuss, collaborate and question different methods, practices, and experiences around multistate foodborne outbreaks.

While we're waiting for people to get into queue, I'm reminded of a project I worked on a couple years ago. I had the pleasure to help design a game about foodborne outbreaks. So I've seen some innovative approaches to address this issue. That being said, I'm not a big fan of loyalty cards. Never have and I would like you to convince me. So can you explain how loyalty cards can be used in these outbreaks? I never thought about it. Now here's your chance to convert me.

Ian Williams: So thanks. Hey this is Ian Williams. I'll take a crack at that one and Dr. Jones and Dr. Doyle can sort of add on. So loyalty cards actually are a very important tool for us when we're trying to determine what is the cause of an outbreak.

This is because early on as we're interviewing people we're often talking to them many weeks after they ate the food that made them ill because it takes a while for the specimen to get into the PulseNet system Dr. Doyle described. So often two or three weeks later we're asking people about foods they ate two or three weeks ago.

And so if I ask you “what food did you eat three weeks ago?” you may not remember. One of the tools we use to help refresh people's memory is if they shopped at a certain store that has a loyalty card, we will ask to get their permission and then get the record of what they bought at that store.

Oftentimes we can - when we're interviewing people we may find two or three people who shop at the same store and by looking at their loyalty cards we can figure out what food they purchased in common which will provide an important clue about what could be causing the outbreak.

So these loyalty cards can provide important information to help us jumpstart our investigation and get us to the source even quicker. One important point to make is we only do this with the customer's permissions. So we work them and the industry has been great about sharing this information in this context as long as we have permission from people to share the information with us.

Tim Jones: This is Tim Jones and I will add that some companies have also been very progressive in once they - once we've determined what product has caused the outbreak that they are looking at their data and their cards to find out all of their customers who purchased the product and contacting them to say that product was involved in an outbreak.

If you've still got, don't eat it. If you're having a problem call back. And I've actually received warnings like that about something my mother bought associated with an outbreak that I didn't even know about.

Ian Williams: Yes or even printing on your receipt. I've seen that at stores where if you - you'll get a receipt and at the bottom it says you purchased this product. You shouldn't eat it. That's a great way that Dr. Jones said to also notify people when there's a recall.

Dan Baden: All right.

Ian Williams: Did we convince you?

Dan Baden: Yes I think you have. I'll go to my store which I don't think they have a loyalty card. That's actually why I chose them. So wonderful. You've converted me. So along that line and again press star 1 if you want to ask a question so you can get into the queue. Let's follow up with another question on how CDC and the food industry work together during outbreak investigations. Can you discuss that a little bit?

Ian Williams: Yes so this is Ian Williams again. So I'll start. We actually can work with them in several different places. Very early in investigation while we're trying to understand which foods could be making people sick, we can talk with industry to understand where foods are being produced and distributed during this certain time of year because food can be seasonal, especially fresh produce.

So understanding how food is being produced and where it's distributed is an important part. Then as the investigation progresses, industry plays an important role in helping us with trace back and maybe Dr. Gensheimer can comment on that. So providing the information you need to go from where the people purchased or ate the food back to the source.

And finally industry plays an important part of once you get to that production environment helping investigators understand how the food was made and where the error could have happened that food contamination could have occurred. So maybe Kathy did you want to comment any further on that?

Kathleen Gensheimer: Sure. Thanks a lot. And just to add onto that, you know, no one agency, state, local, county health department, you know, federal agency can certainly go to these

outbreak investigations to be, you know, in the end to come up with findings that help clarify what is going on, what the vehicle is.

I mean it takes an incredible amount of work together sharing information on an ongoing basis. And as Dr. Williams just stated, the more information you can get from our industry partner can certainly be very helpful as far as where, you know, food has come from, a certain part of the year, where it goes to as far as a very complex distribution cycle and chain which is what we find through some of this trace back activities.

But really it's a continuum of exchanging this information, putting the many pieces of information together and then in the end hopefully coming up with an answer that makes sense and even more importantly putting actions in place that can prevent future such occurrences.

And that information as far as the prevention is what we need to work on with our industry partners because they too are concerned about future foodborne disease events.

Dan Baden: Okay wonderful. So along that same line, is there one segment of the food industry that has the greatest challenge with producing safe food?

Michael Doyle: Well this is Mike Doyle. I could - I think I could answer that. And I think that the biggest challenge out there is foods that are consumed raw or fresh. And produce falls in that category. So I think the produce industry has by far the greatest challenge in producing safe foods because of all the potential sources of contamination as produce is grown and harvested.

Dan Baden: Okay. Yes I was thinking seafood or something along that lines. So that's helped me. Anyone else want to comment on that?

Kathleen Gensheimer: Yes it's Dr. Gensheimer again with FDA. Just to say that I think that we've seen that contamination of a food can occur anywhere along that whole farm to kitchen

chain whether it's the, you know, processing facility at the farm, the manufacturing facility, and all the way to one's kitchen.

And I think it behooves all of us to try to -- I'm going to go back to the whole prevention focus again -- to learn what we can about these outbreaks so that we can benefit from them, put potential strategies in place to prevent future such occurrences.

And although Dr. Doyle's comments about produce are specific, you know, are certainly are on target and we've seen many of these produce related outbreaks associated with these multistate investigations as was also pointed out, you know, we've seen, you know, whether it's, you know, ice cream in *Listeria* or cheese or whatever else has certainly come to play as far as some of these larger investigations. And so we really need to keep our eyes open as far as I think all points of along that food chain.

Dan Baden: Okay wonderful. A related question, can you give an example of an outbreak linked to a specific ingredient that made it really hard to solve?

Ian Williams: Yeah, hi, this is Ian Williams. I'll start on that. There's actually been a number of ones and some of the ones Dr. Doyle listed are classic ones. But I'll give a recent one. So actually we're sort of just wrapping up a very large investigation of *Salmonella* which was linked to eating contaminated cucumbers. And while some people ate cucumbers whole, many people ate them as parts of salads or sushi or on sandwiches.

So there was a lot of not just understanding kind of what sort of the foods but how the foods were prepared and that was important to get to the ingredient level in order to try to determine what food was actually causing illness.

And this was one where we relied on identifying sub clusters of people who ate at the same restaurant or shopped at the same store and understanding what foods that made them ill at that restaurant. In one case it was a salad.

Understanding what went into that salad and then understanding how that can name - those ingredients then overlapped with other sort of clusters of people who were ill. In one case there was a sushi restaurant where they were eating cucumber - rolls that had cucumber in them.

So trying to tease apart those ingredients can be a bit of a challenge and this is why industry can be incredibly helpful to us by providing us information about how they produce their foods, where it comes from, and it can provide us clues to get us to the underlying cause as quickly as possible.

Michael Doyle: And there are spices and other types of what are being called stealth ingredients that go into a lot of different foods and are - have been difficult to identify a particular food or food category as being the vehicle.

And so the industry again could be more involved in helping identify outbreaks by when testing their ingredients such as spices for pathogens like *Salmonella* to add that information, the whole genome sequence information from those isolates, to the database so that future outbreaks could be prevented.

Dan Baden: Wonderful. Never imagined it was that complicated. So let's shift over to more of a state and local viewpoint. Dr. Jones can you say anything about what kind of barriers exist with regard to state and local health departments recognizing that an outbreak is actually a multistate outbreak?

Tim Jones: You know, I think once these germs or isolates get into PulseNet it makes it a lot easier to, you know, we sort of put them in sort of like fingerprints with the FBI. We put them into a national database and we can tell what matches across states.

But there are some states that don't have the capacity to do this DNA fingerprinting on all isolates. And a lot of that just has to do with manpower and cost. And obviously if you're only doing that testing on one out of every ten or some subset, you could easily miss some of those that are the proverbial tip of the iceberg.

There are also states and jurisdictions that just don't have the resources to interview all cases. They have so many *Salmonella* cases, for example, and so few staff that they can't do that preliminary hypothesis generating questionnaire. And if you don't do that, you're never going to hear those little clues that might tip you off. So I think a lot of those limitations occur early on at sort of the detection stage.

Dan Baden: Okay. Wonderful. Following that same thread, what happens when an outbreak becomes national? What is your role at the local or state level once it becomes a national outbreak?

Tim Jones: That's a very good question and it's highly variable. CDC and the federal agencies are always very helpful in getting all of the states together on conference calls, sort of being the hub for sharing information, for communicating.

For example, we work a lot with CDC and CDC may be the agency that communicates with other federal agencies or sometimes with companies, you know, at national headquarters which might be outside Tennessee or outside our jurisdiction. And there are some states that the moment an outbreak is determined to be multistate we'll sort of hand it off to CDC or another agency.

And there are some states that are - have very robust capacity and will actually continue to sort of spearhead large parts of the investigation and will do a lot of the communication with industry on their own, actually do some of the trace back on their own.

So there's always some coordination at the national level but there are a few states that will take a little bit more responsibility for some of the multistate coordination and that just kind of depends on the severity and nature of the outbreak.

Dan Baden: Okay. So let's take it a step further up the chain if you will. Can you talk a little bit about imported food and the difficulties you may have with finding sources that are international?

Ian Williams: Yes, hey this is Ian Williams. I'll start with that one and then maybe get some help from other folks. But I mean one of the challenges as we start to figure out where foods and ingredients come from, if they start to come from outside the United States we don't have specific - always have specific jurisdiction to go and inspect and look at those facilities. So we rely a lot on our partners at both FSIS and U.S. Department of Agriculture's Food Safety Inspection Service and the Food and Drug Administration to help coordinate if a food's being produced outside the United States to work with those companies and those jurisdictions in order to understand what's going on. So maybe I'll turn it over to either Dr. Goldman or Dr. Gensheimer. Do you guys want to comment on that?

Kathleen Gensheimer: Well it's Dr. Gensheimer again with FDA. And, you know, Congress passed the Food Safety Modernization Act commonly known as FSMA in 2011. And this is the biggest overhaul in food safety since FDA was established in 1906.

And it took a piece of legislation that was enacted because of the widespread concern among our many partners be it legislators, consumers, industry, public health professionals, regarding foodborne illnesses that do sicken thousands of individuals each year as has been pointed out by the previous speakers.

And we recognize, Dr. Williams pointed out, that an increasing amount of our food supply is coming in from, you know, the, you know, across the borders. It's a global economy in which we live.

And part of the FSMA has to deal with exactly this issue. In fact it has an imports rule which is going to really transform the food system because it will for the first time hold importers accountable for the safety of imported food by requiring verification that their foods are meeting US food safety standards.

And importers will now need to establish a supply chain management program that keeps records that we can audit and inspect which is really going to help us when we talk about some of these trace back investigations that have been really presented earlier. So it's a very much preventive focused piece of legislation but will certainly

address the newer challenges and concerns that we're seeing with our food safety supplies.

Dan Baden: Perfect. All right well our time is about up and we've had a good discussion but before we close I'd like to ask people to look at slide 38, which is the next to last slide. On this slide, you'll see a description of our prevention status reports or PSRs.

They highlight for all 50 states and the District of Columbia the status of certain policies and practices designed to address ten public health problems including food safety. The PSRs pull together information about state policies and practices in a simple, easy to use format that decision makers can use to examine their state's status and identify areas for improvement.

There's a link directly to the 2013 food safety PSR on the November *Vital Signs* Town Hall Teleconference web page. You can also visit the bottom of this slide for all PSRs by state or topic.

Finally, please let us know how we can improve these teleconferences. Email your suggestions to ostltsfeedback@cdc.gov. That's O-S-T-L-T-S feedback, all one word, @cdc.gov. We hope you'll be able to join us for next month's town hall on Tuesday, December 1 when we focus on HIV treatment.

Thank you to all our presenters and to everyone on - who attended the call. I'm headed out to get a loyalty card and hope you will as well. And that ends our call. Thank you everyone.

Ian Williams: Goodbye.

Coordinator: That will conclude today's conference. Thank you for participating. You may disconnect at this time. Speakers stand by for post conference.

END

